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My Last New North American Fleas

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The fleas listed here as new, bring to 50, the number described by the writer and clears from his desk the accumulation of odds and ends through the years. The types are all deposited in the U. S. National Museum, first paratypes in the British Museum.

Thomomys and the Dactylopsylla

Investigators realize the almost endless variety found in western pocket gophers. Hall mentions 38 from Nevada, Bailey 15 from Oregon, around 10 are recorded from Washington. Their giant fleas (*Dactylopsylla*) are almost as variable. *D. comis*, the first of these northwest giants to be described, ranges everywhere in the Cascade Mountains and east in Oregon and Washington. West of the Cascades one finds a variable series in which the differences are to be found in the breadth of the VIII St. male, its apical angle, shape of its membranous appendage; and apical outline of VII St. female. The four listed below as new are all between 4 and 5 mm. in length.

Dactylopsylla comis scapoosei new subspecies

Closest to *D. c. comis* but with VIII St. male very narrow, apical angle rounded but very flat and membranous flap approaching the rectangular. VII St. female generally without undulations. Types were taken off *Thomomys d. douglasi* (type host) at Scapoose, Columbia County (type locality), Oregon on May 8, 1951.

Dactylopsylla comis tacomae new subspecies

Like *D.c. comis* but with VIII St. male apically angulate the angle obtuse, the membranous flap large, bulbous in outline. VII St. female without undulations. Types were taken at Tacoma, Washington (type locality) off Tacoma pocket gopher (type host) on February 26, 1951.

Dactylopsylla comis walkeri new subspecies

Like D. c. comis but VIII St. male with acute apical angle, the membranous flap small and circular in outline. VII St. female with posterior squarish lobe. Types were taken at Wedderburn, Curry County, Oregon (type locality), off Thomomys m. helleri (type host) on September 18, 1949. This flea bears the name of Professor Kenneth Walker of Puget Sound College, Tacoma, Washington, long time friend of the writer.

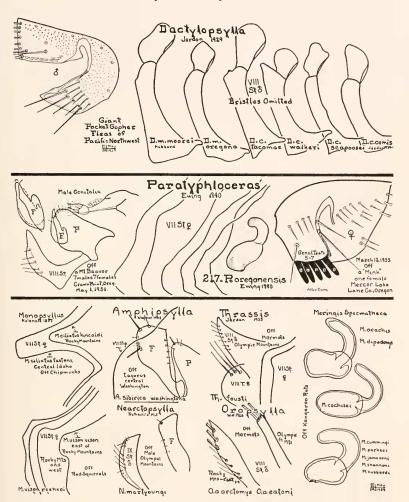
Dactylopsylla moorei oregona new subspecies

Close to *D. m. moorei* from southwest Washington and separated from the range of the parent by the great Columbia River. Found in the northwest section of Oregon the new subspecies differs from *D. M. moorei* in that VIII St. male is narrower, the apical angle apically rounded flat, with very much smaller membranous flap and somewhat circular in outline rather than rectangular. VII St. female variable, with or without squarish posterior lobe and concave dorsal margin. Types were taken at Devils Lake, Lincoln County, Oregon (type locality) off *Thomomys hesperus* (type host) on September 8, 1949.

Lagurus and Amphipsylla sibirica

There appears in February on Lagurus at one location in central Washington a small number of fleas close to A. s. pollionis. The writer found one male and one female only during 1949, 1950, 1951, sorted out of hundreds of other Lagurus fleas from the same locality west of the Columbia River. Lagurus taken east of the river did not carry the flea. Since the Washington form is separated from A. s. pollionis of Alberta, Canada by two natural barriers, the Columbia River and the Rocky Mountains

and since differences between the two have been called to the attention of the writer by Dr. Karl Jordan, he here establishes.



Amphipsylla sibirica washingtona new subspecies

Close to A.s. pollionis but with these differences: Male: Frons not so strongly curved in upper part. Spinlets on abdominal terga 3,4,3,1,1. Hind tibia on outer surface with 12 subdorsal

lateral bristles, on inner surface an oblique row of 6. VIII St. with a longitudinal row of 5 long bristles. Dorsal margin of finger and especially upper posterior angle more rounded and the two spiniforms nearer together. Apical ventral sclerite is straighter and the bulbous tip is more abruptly curved upwards. Female: Apical margin of VII St. undulate, armed with 5 major, 4 medium and 6 small bristles to the side. Types were taken at 18 miles east of Ellensburg, Washington (type locality), off Lagurus curtatus pauperrima (type host) on February 6, 1951.

The Allotype Male of Paratyphloceras oregonensis Ewing

This, the mystery flea of the far West, was described by Ewing in 1940 from a single female taken off a mink at Mercer Lake, Lane County, Oregon on March 12, 1933 by H. H. Stage. The writer suspected the flea to be off Aplodontia but over a period of 40 years and hundreds of Mt. Beaver records had never taken it. On May 1, 1951, six Aplodontia r. rufa were taken by the writer at Crown Point, Oregon. Five were without fleas but the sixth carried 14 which upon examination proved to be 7 males and 7 females of P. oregonensis, the first ever seen by the writer. The pattern of the male genitalia now available; the writer places the genus between Rectofrontia and Actenophthalmus with the male suggestive of R. fraterna and A. heiseri, and is described as follows. Process large, well rounded and entire. Finger small in comparison to P., slender, apically rounded to pointed, extending to apex of P. with unusually large articulating surface with P. and armed posteriorly with several small bristles. VIII St. hooked (like regular logging dog), vertical arm with many posterior bristles. Pygidial area similar to Micropsylla. Female VII St. entire, high and undulate in outline. Spermatheca similar to R. fraterna but with more barrel shaped body. Genal teeth vary from 5 to 7 in this flea and fifth segment of tarsus II with 5 pairs of lateral plantar bristles, fifth segment of tarsus III with 6 pairs. Types bear writer's number 2800.

Olympic Mountains of Washington

For a number of years Dr. Murray Johnson, physician and surgeon of Tacoma, Washington has been the leading naturalist in the Olympic Mountains. From the many fleas sent to the writer by him the following three are now described as new.

Oropsylla arctomys eatoni new subspecies

Close to O. a. arctomys Baker but with following differences. Male: Finger narrower, proportions different; acetabular above lowest point of anterior margin of F. and posterior margin of P.; additional bristles present; VIII St. with only 3 major bristles close to apex. Female: VII St. entire, a squarish lobe in outline; spermatheca with body smaller, less rounded, tail longer. Types were taken off Marmota olympus (type host) in Olympic National Park, Washington (type locality) on August 12, 1951. This flea bears the name of Mr. Alden Eaton, late of Seattle, long time friend of the writer and victim of heart disease at 45.

Thrassis fousti new species

In the writer's opinion this flea lies midway between *Th. acamantis* Roths. and *Th. spenceri* Wag. with male genitalia being proportioned between the two, and in the female VII St. being entire and squarish. Types were taken off *Marmota olympus* (type host) in Olympic National Park, Washington (type locality) on August 12, 1950. This flea bears the name of Mr. Guy E. Foust, late of Sacramento, California, brother-inlaw of the writer and victim of heart disease at 50.

Nearctopsylla martyoungi new species

Close to *N. hyrtaci* Roths. but with following differences: Male. Pronotal comb more strongly curved, spines greatest so far found in genus, totaling 39; Pronotal area from comb to base almost as wide subdorsally as the subdorsal spines are long. Bristles on abdominal tergites more numerous; tergum VII sinus extends only half so deep and at its margin there are about a dozen bristles arranged in two irregular rows; Process and

finger nearly the same; manubrium not so narrow towards the tip; posterior margin of dilated upper end of vertical arm of XI St. more evenly convex, ventral arm very much broader. The female is unknown. Dr. Karl Jordan has supplied the above differences. The holotype male (only specimen) was taken off Scapanus townsendi (type host) on Hurricane Ridge, Olympic National Park, Washington (type locality) on August 12, 1950. This flea bears the name of Mr. Martin Young, late of Portland, Oregon, cousin of the writer, a Marine flame thrower who in a voluntered mission to burn out a Japanese pill box accomplished the mission on the Island of Guam at the cost of his life.

Western Squirrels and Monopsyllus

The writer has before him two fleas of western squirrels which he considers new, the first to be called

Monopsyllus ciliatus fasteni new subspecies

Close to *M. c. kincaidi* Hub. but differing from it and all other ciliatus in that the VII St. female is with a broad rectangular lobe suggestive of the *M. eumolpi* complex. The male is unknown. The types were taken off a chipmunk (type host) 10 miles north of Potlatch, Latah County, Idaho (type locality) on July 22, 1945 and bear the writer's number 2506. This flea bears the name of Dr. Nathan Fasten, Seattle, Wash., major professor of the writer while at the University of Washington.

Monopsyllus vison reeheri new subspecies

This is the form of *M. vison* found west of the Rocky Mountains. The writer has collected it in Idaho, Washington and Oregon. The constant difference is in the VII St. female which is entire and squarish in apical outline. The types were taken at Hepner, Oregon (type locality) (western limit of type host range) off *Tamiasciurus h. richardsoni* (type host) on June 15, 1950 and bear the writer's number 2760. This flea bears the name of Mr. Max Reeher, federal entomologist at Forest Grove, long time friend of the writer.

A New Meringis from the Southwest

The writer has before him specimens of *Meringis arachis* Jord. from all over its range and a small series close to it but differing in the female which shall be called

Meringis cochisei new species

The male of the new species is similar to *M. arachis* but in the female the spermatheca is differently shaped from all described *Meringis*, being elliptical. The types were taken off Hog-nosed Skunk (true host probably *Dipodomys*, the skunk its predator) in Baboquivari Mountains, Arizona (type locality) on January 16, 1931. The flea bears the name of the famous Indian Chief Cochise who ranged through the type locality and left his name on many natural objects in Arizona.

Nomenclature Notice

All comments relating to the following proposals should be clearly marked with the file number and should be in the hands of Francis Hemming, Secretary, 28 Park Village East, Regent's Park, London N.W.1, England before November 11, 1954.

Details on the following are in *Bull. Zool. Nomencl.* Part 6, Vol. 9:

immigrans Sturtevant 1921, as in *Drosophila immigrans*, proposed validation of (pp. 161) (File Z. N. (S.) 711). pruni Geoffroy 1762, as in *Aphis pruni*, proposed validation

of (p. 163) (File Z. N. (S.) 428).

Lachnus Burmeister 1835, and Cinara Westwood 1835, proposed designation of type species (p. 174) (File Z. N. (S.) 174).

In Part 7 of Vol. 9: Melanargia Meigen 1828, proposed vali-

dation of (p. 221) (File Z. N. (S.) 708).

In Part 8 of Vol. 9: Geoffroy 1762, Historie abrégée des insectes qui se trouvent aux environs de Paris, proposed validation of the following six names published in, for genera: Stratiomys, Stomoxys, Volucella, Nemotelus, Scatopse, Bibio (p. 241) (File Z. N. (S.) 710).